## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Applicant: Trelewicz		) Art Unit: 2122
Serial No.: 09/693,090		) Examiner: Kiss
Filed:	October 20, 2000	) BLD9-2000-0060-US2
For:	COMPILER FOR ENABLING MULTIPLE SIGNED INDEPENDENT DATA ELEMENTS PER REGISTER	<ul> <li>June 2, 2004</li> <li>750 B STREET, Suite 3120</li> <li>San Diego, CA 92101</li> </ul>

## **RULE 132 DECLARATION**

Commissioner of Patents and Trademarks Washington, DC 20231

Dear Sir:

- I, Joan L. Mitchell, Ph.D., declare as follows:
- 1. I am one of the present inventors and have been an IBM Fellow since May 2001. I have been elected to IBM's Technical Academy and have been designated an IBM Master Inventor, having been a named inventor on over fifty issued U.S. patents and having received 25 Plateau Awards (one for every four applications filed). I am also an IEEE Fellow and was editor in the late '80s and early '90s for the JPEG Committee. I have been informed that I will be inducted this October into the National Academy of Engineering, Section 5 (Computer Science and Engineering).
- 2. I have reviewed the paper referred to in the Office Action as FiD98 (the "SWAR" paper). The SWAR technology requires that the separate elements (sometimes referred to in the SWAR paper as "fields") be kept separate from each other and not interact. In the SWAR terminology, the elements in a

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in a register remain "partitioned". The ways partitioning is achieved by and large can be found on pages 5-7 of the SWAR paper.

- 3. In contrast, the present claims permit interaction (by, e.g., borrowing and carrying) between the data elements. In our specification, we refer to the data elements under these conditions as being "packed". In effect, using terminology from the SWAR paper in the context of our invention, we use unpartitioned instructions on packed data, whereas this is not permitted by the SWAR authors.
- 4. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful, false statements may jacopardize the validity of the application or any patent issued thereon.

Dr. Joan Mitchell

Respectfully submitted,

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